Somerville Climate Action Plan







City of Somerville, Massachusetts
Commission on Energy Use and Climate Change
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What Can Somerville Do?

- Reduce energy consumption in municipal operations and use more environmentally friendly energy sources
- Encourage residents and businesses to do the same
- Act as a model to nearby communities





Events Leading to Action Plan

Summer 2000	Concerned residents form Somerville Climate Action (SCA)
Feb. 2001	Board of Aldermen endorse participation in the ICLEI Cities for Climate Protection program
Summer 2001	ICLEI funded intern performs baseline emissions study for Somerville
Nov. 2001	Board of Aldermen establish Commission on Energy Use and Climate Change (CEUCC)
April 2002	Mayor appoints members to CEUCC
Aug. 2002	Aldermen pass a resolution to reduce CO ₂ emissions to 1990 levels by 2010
July 2003	CEUCC completes Climate Action Plan

Somerville's Prior Accomplishments

- Several municipal buildings updated with more energy efficient equipment
- Energy efficient street and traffic lighting
- Active recycling program
- Environmentally preferable (including energy efficient) products purchasing

Green building practices in Capuano School



Action Plan

- Objective: Recommend actions for Somerville to reduce emission of greenhouse gases for all sectors:
 - Residential
 - Municipal
 - Commercial and Industrial
- Criteria for high priority action
 - Potential to reduce emissions
 - Achievability (cost and technical)
 - Feasibility
- Substantial input provided by experts and people responsible for implementation

Municipal Action Items

- Energy efficiency and conservation retrofits
- Green procurement policy
- Energy manager
- Promotion of bicycling
- Evaluation of purchasing green power





Energy Retrofits

- Energy and conservation retrofits reduce consumption of fossil fuels, electricity, and water
- Retrofits include upgrades of HVAC, lighting, boilers, and chillers
- Recommend retrofits with short pay-back periods
- Use utility programs to assist with cost of retrofits

Building benchmarking to identify buildings most in

need of retrofits



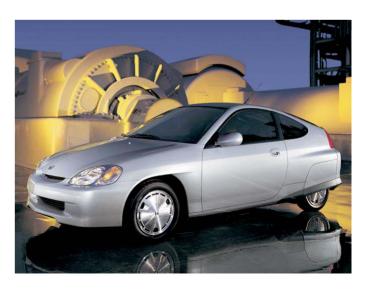
Green Procurement Policy

- Make energy efficiency a criteria for purchasing
- Examples include city automobile fleet and transportation contracts, appliances, and equipment
- Use control systems such as Vending Misers[™] or occupancy sensors









Energy Manager

- Create position within DPW to track municipal energy consumption and greenhouse gas emissions; recommend and implement reduction measures
- Manager would work with DPW and contractors and coordinate efforts among municipal departments
- Experience from other cities shows that positions can pay for themselves through energy saved

Promote Use of Bicycles

- Support bike path extension
- Implement community education programs
- Install more locking rings and bike racks
- Mark and maintain city roads
- Modify zoning to encourage bicycle access







Evaluate Green Power Purchasing

- Green power comes from sources with low environmental impact
- Current market is not mature enough to recommend purchase of green power
- This action item describes the annual evaluation steps that should be taken for future purchasing







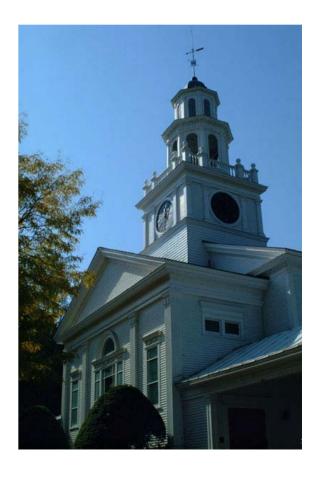


Residential Action Items

- "Somerville Sees the Light" Campaign
- Green Sanctuary Program







Somerville Sees the Light

- Goal: Convert one incandescent light bulb per household to a compact fluorescent light bulb (CFL) within one year
- CFLs use a fraction of the energy of a standard bulb and last up to ten times as long
- Campaign is designed to educate citizens on climate change and provide a simple step toward a solution
- Arlington, Medford, Salem also involved in campaign





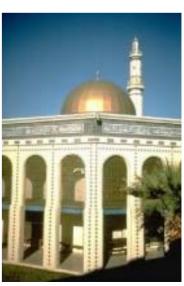


Green Sanctuary Program

- Goal: Make houses of worship more energy efficient
- Encourage congregants to make homes more energy efficient
- Part of a program conducted by Interfaith Power and Light (IP&L)
- People are more likely to make change as members of a communal affinity group







Commercial and Industrial Action Items

- Implement energy efficiency measures
- Promote green practices in new construction and renovation







C&I Energy Efficiency Measures

- Encourage small businesses to use existing energy efficiency programs through utilities
- NSTAR "Small Business Services" program includes free energy audits
- NSTAR pays for 50-80% of the recommended upgrades
- Keyspan offers rebates on high efficiency Equipment





Energy Efficiency-Somerville Businesses

Examples of Somerville businesses that have participated in the energy efficiency program

<u>Customer Name</u>	<u>Address</u>	kwh/Saved	Savings/Yr
James A Kiley Company	15 Linwood St	69521.8	\$6,952.18
Central Bank	399 Highland Ave	57865.9	\$5,786.59
Mass Envelope Plus	30 Cobble Hill Rd	47064.6	\$4,706.46
Highland Auto	625 McGrath Hwy	40778.4	\$4,077.84
Tracer Technology Inc	20 Assembly Sq Dr	37039.3	\$3,703.93
St. Benedict's School	17 Franklin St	35429.5	\$3,542.95
Altitude	363 Highland Ave	16792.9	\$1,679.29
Fellsway Auto Repair	693 McGrath Highway	15439.0	\$1,543.90
Vicente Bros Inspection Station	345 Medford St	14171.2	\$1,417.12
Powder House Convenience	850 Broadway St	13191.7	\$1,319.17
YNOT Variety	140 Willow Ave	10420.6	\$1,042.06
Joe's Liquor	164 Broadway St	10181.8	\$1,018.18

Promote Green Building Practices

- Provide information to encourage green building practices in new construction and renovation
- Implement incentive based zoning and permitting process for green projects
- Require all new buildings to fill out a LEED worksheet

Recommend that all large development projects meet

a LEED Silver rating





Next Steps

- CEUCC & SCA have begun implementing action items and working with relevant agencies
- Action Plan is a work in progress we depend on fellow Somervillians for help!
- Progress on the action plan will be evaluated annually and a "report card" will be issued

How Recycling Staff Can Help

- Make link between recycling and reduction of GHG
- Promote recycling at climate action events
- Use environmental benefits calculator in recycling outreach materials
- Publicize recycling results including climate benefits

Recycling is part of the climate solution!